





The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning

RESEARCH CONFERENCES

ESF-VR-FORMAS Conferences on Global Change Research

Global Environmental Change:

The Role of the Arctic

Nynäshamn • Sweden 13-17 October 2007

Chair: Jörn Thiede, Alfred Wegener Institute, DE

Organising Committee: **Jonas Björk**, Swedish Research Council.

Stockholm, SE • **Dorthe Dahl Jensen**, Niels Bohr Institute, Copenhagen, DK • **Paul Egerton**, European Science Foundation, Strasbourg, FR

- \bullet $\mbox{Volker Rachold},$ International Arctic Science Committee (IASC), SE
- **Sverker Sörlin**, Royal Institute of Technology, Stockholm, SE

www.esf.org/conferences/07240



Photo by Hans Oerter, AWI

Final Programme

Saturday, 13 October

Late afternoon /

Registration at the ESF Registration desk

early evening

19.30 Welcome Drink

20.00 Dinner

Sunday, 14 October

08.45-09.00 Conference Opening

Session 1: The Contemporary Arctic

Chair: Volker Rachold, International Arctic Science Committee (IASC), SE

09.00-09.25 Michael Tjernström

Stockholm University, SE

What (little?) do we know about the Arctic atmosphere?

09.25-09.50 Peter Schlosser

Columbia University, US

The Arctic Ocean: Recent Changes, Global Connections, and Needs for

Long-Term Observing Systems and Predictions

09.50-10.15 Leif Anderson

Göteborg University, SE

The Oceanic Carbon Cycle

10.15-10.40 Coffee break

10.40-11.05 Peter Lemke

Alfred Wegener Institut für Polar und Meeresforschung, DE

Sea Ice Variability

11.05-11.30 Jon Ove Hagen

University of Oslo, NO

Recent Changes in the Mass Balance of the Austfonna Ice Cap, Svalbard

11.30-11.55 Pavel Groisman

National Climatic Data Center, US Climatology in the High Latitudes

11.55-12.20 Hans-Wolfgang Hubberten

Alfred-Wegener-Institut für Polar- und Meeresforschung, DE Arctic warming and the role of degrading permafrost

12.20-13.30 Lunch

13.30-13.55 Terry Callaghan

Royal Swedish Academy of Sciences, SE

Current and projected impacts of climate change on arctic terrestrial

ecosystems

13.55-14.20 Birger Poppel

Ilisimatusarfik University of Greenland, GL

	Arctic living conditions and ways of life under rapid change
14.20-14.45	Joan Nymand Larsen University of Akureyri, IS Northern economies in a time of change
14.45-15.10	Annika Nilsson Stockholm Environment Institute, SE A changing Arctic climate: More than just weather (short talk)
15.10-16.00	John Walsh University of Alaska, US Recent Arctic change: Natural and anthropogenically-driven components (keynote)
16.00-16.30	Coffee break
16.30-19.00	Poster session
19.30	Dinner

Monday, 15 October

Session 2: The Arctic in the Past		
	le, Alfred-Wegener-Institut für Polar- und Meeresforschung, DE	
08.30-08.50	Jörn Thiede Alfred-Wegener-Institut für Polar- und Meeresforschung, DE Early Arctic Ocean Extreme Paleoenvironments (Mesozoic and Cenozoic)	
08.50-09.10	Martin Jacobsson Stockholm University, SE Glacial/Interglacial Arctic Ocean Paleoenvironments	
09.10-09.30	Dennis Darby Old Dominion University, US Holocene Arctic Ocean Paleoenvironments	
09.30-09.50	Andrei Sher Russian Academy of Sciences, RU The role of the (Siberian) Arctic in the evolution of the continental environment of Eurasia in the Pleistocene	
09.50-10.10	Sven Funder University of Copenhagen, DK An ice-free Arctic Ocean in the Early Holocene	
10.10-10.30	John-Inge Svendsen Bergen University, NO Ice Age humans in the Russian Arctic	
10.30-11.00	Coffee break	
11.00-11.20	Dorte Dahl Jensen University of Copenhagen, DK Paleo records from ice sheets and glaciers	
11.20-11.40	Lester Lembke-Jene Alfred-Wegener-Institut für Polar- und Meeresforschung, DE The challenge of a new infrastructure	
11.40-12.00	Jens Christensen	

	Danish Meteorological Institute, DK The freshwater budget of the Nordic Seas: The FreshNor Project (short talk)
12.00-12.20	Konstantin Kunshenko Russian State Hydrometeorological Univerity, RU Density convection in sea water (short talk)
12.20-12.40	Nils Noergaard-Pedersen GEUS, DK New records of last interglacial-holocene conditions from the Northern Greenland Margin (short talk)
13.00-14.00	Lunch
14.00-18.00	Excursion or free afternoon
19.00-20.00	Dinner
20.00-22.00	Poster Session

Tuesday, 16 October

Session 3: The Arctic in the Earth System

Chair: Dorthe Dah	air: Dorthe Dahl Jensen, University of Copenhagen, DK	
08.30-09.00	Jaqueline Flückiger ETH Zürich, CH Abrupt climate changes and the thermohaline circulation	
09.00-09.30	Shawn Marshall University of Calgary, CA Ice Sheets and Cryosphere	
09.30-10.00	Katherine Richardson University of Copenhagen, DK Global climate change and the carbon cycle in the ocean	
10.00-10.30	Coffee break	
10.30-11.00	Henrik Svensmark Danish Space Center, DK Cosmic Ray influence on cloud formation	
11.00-11.30	Martin Truffer University of Alaska, US Ice streams on the Greenland Ice Sheet as fast climate indicators	
11.30-12.00	Kristof Sturm Bergen University, NO The role of the carbon cycle in the Earth System	
12.00-12.20	Gudfinna Adalgeirsdottir Danish Meteorological Institute, DK The response of Greenland Ice Sheet model to a new geothermal heat flux estimate and output fields of a Regional Climate Model (short talk)	
12.30-13.30	Lunch	

Session 4: Future Climate Changes – Consequences for the

Arctic

Chairs: Paul Egerton, European Science Foundation, FR and Sverker Sörlin, Royal Institute of Technology, SE

13.30-14.15	Kirsten Hastrup University of Copenhagen, DK Topographical mementos: Re-orientations of peoples and cultures under climate change, 20 th and 21 st centuries
14.15-15.00	Hanne Petersen University of Copenhagen, DK Legal implications of climate change: Rights of resources, property, culture
15.00-15.45	Paul Egerton European Science Foundation, FR Polar Programs of the Future: Envisioning New Generations of Integrated Research
15.45-16.15	Coffee break
16.15-16.45	Sverker Sörlin Royal Institute of Technology, SE The Science Politics of Climate: What can we learn from history?
16.45-17.15	Jessica Shadian Barents Institute, NO Shifting the Legal Boundaries of Sovereignty: The Politics of global warming science
17.15-19.00	Forward Look Plenary Discussion
19.30	Get-together & Conference Dinner

Wednesday, 17 October

8:00 Breakfast & Departure

Abstracts, Posters & Short Oral Presentations

There will be no short talks other than those listed on the programme.

All other abstracts are accepted as posters. The list of accepted posters is available from www.esf.org/conferences/07240

Posters can be fixed with drawing pins onto double-sided poster panels. Recommended poster size is 200 cm high x 120 cm wide. Use letters and drawings that can be read from approximately 100 cm distance.